Client Satisfaction, Primary Health Care & Utilization of services in Sidama district, Southern Ethiopia, 2000.

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Contents Pages

List of tables and figures Pages

List of Abbreviations

WHO – World Health Organization

PHCU – Primary Health Care Units

PHC – Primary Health Care

USSR – United Soviet Socialist Republic

SNNPR – Southern Nations and Nationalities Peoples' Region

HC – Health Center

VRQ – Visit Rating Questionnaire

OR – Odds Ratio

CI – Confidence Interval

ANC – Ante Natal Care

FP – Family Planning

CWC – Child Welfare Clinic

HIV/AIDS – Human Immunodeficiency Virus/ Acquired Immuno-Deficiency Syndrome

NORAD - Norwegian Aid for Development

Operational Definitions

- **Clients – Clients in this study are respondents who filled the questionnaire from study population. Using the word client is preferred, from Patient, because of parents who, actually were not patients, but filled the questionnaire on the behalf of their children.**

- **Satisfaction – In the present study satisfaction may be understood as the client's reaction to the primary care they received, relative to a conscious or subconscious standard that the patient had set before or during the encounter.**

- **Level of satisfaction – Level of satisfaction in this study may be understood as 'proportions of clients' who were satisfied with the variables, representing dimension of client satisfaction.**

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Abstract

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Client satisfaction, one of the health outcome measurements, is directly related with utilization of services and continuity of care. Moreover, the possible effect of clients' satisfaction that might bring on improvement of the health status of patients adds on the merit of studying the subject. However, so far few reports on client satisfaction have been made on developing countries. This study presents findings on multi-dimensions of client satisfaction, carried out in Southern Ethiopia.

Objectives: As part of the comprehensive assessment, the study evaluates quality of primary care from clients perspective on the following multi-dimension: Informativeness, Humanness, Professional skills, Accessibility, Overall quality of care & health care providers, Structures, Reception, Perceived need for further laboratory investigations & drugs, Expectation met, Need for alternative physician and Recommendation of services.

Method: An episode specific, exit, interview method using validated VRQ (Visit Rating Questionnaire) was made for data collection. The responses were scored using Likert scales. Relationships between confounders and main variables were adjusted with logistic multiple regression.

Setting and subjects: A representative sample of 329 clients in Sidama district primary care were interviewed to evaluate the health delivery process from their view by filling a questionnaire.

Results: Overall, in this study clients regarded 67% of primary care quality as poor and very poor. Infrastructures (equipment and sanitation), overall quality of care and unmet expectations were potential quality problems. These are followed by inter-personal relationships, professional skills and under prescription of drugs and laboratory investigations, as perceived by clients. Over the multi-dimensions examined, level of education and income were the major influencing factors on clients' satisfaction.

Conclusions: In this study, a significant drop in quality of PHC services from clients perspective was seen in the district. Such drop of quality might have been a reason for low utilization and less continuity of care, which were reflected in this study. So, quality improvement process in the district is required to consider meeting clients' expectation (raising level of satisfaction) as a target. Furthermore, the results in this study depicted the importance of clients to make clear signs of quality problems. So if clients are accepted as integral part of quality of health care, considering clients in evaluation process and planning, too, may be of great help in improving quality.

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1. Introduction

1.1 Client satisfaction, Utilization of the services and Primary health care

Utilization of the public primary health facilities has become apparently low in many developing countries *(1),* where a persisting worse level of health status[b] obviously calls for frequent assessment of quality of health care and improvement. Since its inception, client satisfaction is gaining attention as one of the major health outcome[c] measurement *(2,3).* It is also being increasingly recognized that clients or 'consumers' view should be taken into account as part of a comprehensive assessment of quality of health care *(4-6).*

[b] Health status refers to a 'snap-shot' view of a patients' health and well being *(14).*
[c] Health outcome defined as 'changes in patients' health and welfare resulting from medical care or from a lack of medical care *(14).*

Moreover, client satisfaction may be considered more credible due to the possible effect it might bring on health status improvement *(7,8).*

For countries with low utilization[d] of the available primary health services, concern about assessing and assuring quality of primary health service from client perspective might be of great interest to health managers. This is because; client satisfaction and perceived quality will influence utilization of services *(9,10),* and thus continuity of care *(11,12).* This notion is also reflected when quality assurance program in Urrunaga clinic in Chiclayo, Peru, has raised both utilization rate and client satisfaction after tackling root causes for low utilization *(13).*

Given health as a human right after Alma-Ata, USSR (now Almaty, Kazakhstan) in1978, conference many countries tried to access health facilities at the community level to fulfil health for all policy *(13).*

[d] Utilization of the health service is expressed as the proportion of people in need of the health service who actually receive it in a given period. On the other hand utilization is actual coverage of the target population with the different health services *(15).*

Potential access of health facilities, however, will not necessarily lead to appropriate utilization if people are not willing to make themselves available and use the health facilities offered. In some cases, facilities exist but people don't use them because they are not satisfied with the health services. Without appropriate utilization and consumers satisfaction the effectiveness of the primary health service is severely limited *(16,17)*. Aday and Anderson also recognize the importance of the prior use of the health service in affecting the future behavior *(18)*. Their model of framework recognizes that each consultation of the health service results in a level of consumer satisfaction based on such factors as convenience, cost, courtesy, and equity, which will in turn influence the future decisions regarding health service utilization.

Primary health care is a place of entry (the "gatekeeper") into health services and the locus of continuing care for most of the health problems that occur in the population *(19)*. Hjortdahl and Even have shown evidences on the positive effect of continuity of care[e] on patient satisfaction *(11,12)*. Therefore, level of relationship between the primary health system and the population is very valuable, if client should continually consume the provision of care and their involvement in health care improvement is desired. Client involvement in this respect is not only desirable, according to WHO, but also a social, economic and technical necessity *(20)*.

Though there is an ongoing debate on what constitutes good primary health care *(21)*, comparison of ten Western countries suggested that a strong primary care system be positively related to high client satisfaction with health care, if the influence of expenses

[e] Continuity of care is a concept often discussed in relation to health care utilization and health care delivery system. Continuity of care defined as the long term relationship build and maintained over time, where the doctor takes on a responsibility for the patient different health needs,- or to coordinate such needs, regardless of the presence of any specific disease *(11)*.

on health care was controlled *(19).* However, insights into clients' view in good primary health care is that still limited *(22).* Priorities in health care are still usually determined by professionals and health authorities *(3).* A literature review of patient satisfaction studies in primary care showed that clients were rarely involved in the selection of indicators *(23).* Systematic literature analysis of Wensing's et al on patients' opinion and priorities with respect to primary care revealed that most studies were done in developed countries.

Comparatively there have been a few reports of patient satisfaction researches in developing countries *(17,24-26).*

Finally, since measure of peoples' perception and views' are increasingly shown to have measurement property, it is appropriate to ask more specific questions of measurement of satisfaction *(27-29).* Therefore valid and reliable documentation is needed of the importance of different aspects of health care from clients point of view *(30).* Where most health problems could be handled by preventive measure, at primary health care level this has paramount importance for better *utilization of the services, continuity of care, involvement of clients in health care evaluation and improvement.* All these are valuable for betterment of health and thus the health status.

This is a multi-dimensional study that examines level of client satisfaction on primary health care in Sidama district, Southern region of Ethiopia, east Africa.

1.2 Health care system in Ethiopia

In Ethiopia, until ten years ago the health system organization and management was very centralized and unprofessional with minimal community involvement.
Since recently there has been more effort to decentralize the health planning and management to the regional and district level *(31).* However, implementation of the decentralization and governance of provider institutions, particularly with respect to the extent of the autonomy, whether fully (or at least optimally) operational or not, is yet to be examined.

The current organizational setting of health care delivery, in Ethiopia, is a four-tier system. The four tier system has primary health care units *(PHCUs, which include health posts and health centers)* at the most local level, District hospitals, regional hospitals, and special referral hospitals. The network of facilities at different level (primary, secondary and tertiary) is weak or poor. The referral system starts from the PHCUs to line up to the higher level according to the above sequence. Nevertheless, the "gate keeper" role of the primary health care is still questionable.

In Ethiopia, at the district level the staffing pattern for the top management of provider organizations is not always a professional administrator. Where as, the health centers level the staffs are a combination of physicians, health officers, registered nurses and health assistants. Community health workers act at the community level (or what is locally called 'kebele level').

Both public and private practitioners are operating at full time basis in Ethiopia. The source of public expenditures on health is both from the government and donor agencies and all the revenue collected from public sector, for instance users fee, are presently disposed to the ministry of Finance.

1.3 Health status and its progress in Ethiopia

The table below shows (Table 1) that Ethiopia still has one of the worse health status indicators. Compared to Botswana, the country with dynamic change on health status in the last three decades (Table II), improvement in Ethiopia is minimal.

Table I Health status indicators in Ethiopia, 1999.

Health status indicators	Ethiopia
Infant mortality rate (IMR)	110 (per 1000 Live Birth)

Child mortality rate (CMR)	173 (per 1000 Live Birth)
Maternal mortality rate(MMR)	5.6 (per 1000 Live Birth)
Life expectancy at birth (LE)	53.4 years, at present lower due to HIV/AIDS
Fertility rate (FR)	6.3 Child/Woman
Crude birth rate (CBR)	44.7 (per 1000)
Crude death rate (CDR)	17.9 (per 1000)

Source: UNICEF Information Statistics, 1999.

Table II. Changes in health status indicators, in Botswana, IMR and CMR from1871-1991.

Indicators	1971	1981	1991
Infant Mortality Rate (IMR)/1000Live Birth	100	71	45
Child Mortality Rate (CMR)/1000Live Birth	147	109	56

Source: population and housing censuses 1971,1981,1991, Botswana.

2. Objectives of the study

The currently undergoing researches in quality assessment area in southern region and in Ethiopia as a whole indicate that quality of health care improvement is a priority. As part of that, this study evaluates, in general, the quality of health care at PHC level from the clients' point of view and reflects the outcomes on "importance of patient priority" for health care planning and reform of the organization of care.

Specifically, the research determines the level of clients' satisfaction, after a visit, on Informativeness (on the diagnosis and treatment and drug use), Humanness (conduct, respect and friendliness) of the general practitioner and the nurse, Competence of the general practitioner and the nurse, Accessibility (financial, waiting time, duration of consultation, convenience to approach health care providers), Overall quality of care and health care providers, Overall quality of facilities (and building, equipment, cleanness, privacy), Reception (smoothness of registration); and Perceived need for further laboratory investigation, drug and treatment, Extent of expectation met, Level of clients' need for alternative physician, and Recommendation of services for families friends.

3. Rationale of the study

Quality of health care improvement is a priority in the country, Ethiopia, especially in southern region where the health status is worse than other part of the country. A tendency of decline in use of the public health sector is seen in southern region of Ethiopia as indicated by back and forth use of private and public sectors. Utilization of services and perceived quality of health care go hand in hand. And client satisfaction is a method to study on perceived quality of care, and client satisfaction is also directly related with utilization rate. And so far, client satisfaction study at PHC level has not been done in Southern region. Two years back there was one study, but it was made at hospital level. Studies on client satisfaction in developing countries are also limited. Because of these client satisfaction is considered to be important if studied in the region.

4. Methodology

4.1 Study area, Sidama District (zone) in Ethiopia.

Sidama district is one of the nine districts that are found in Southern Nations, Nationalities and people's region (SNNPR). SNNPR is one of the fourteen regions in Ethiopia. The health problems of this district are typical with the rest of the region, with health status indicators worse than average in Ethiopia *(32).* Communicable diseases making up the top ten causes of morbidity.

Sidama district is located about 275km South of Addis Ababa (the capital of Ethiopia), and it is in mid-altitude of 1600-2300 meters above see level *(33).* This district is the largest in the region with 6793sq.km of total area, and the population is 2 million (18% of the region). While 150,000 people live in urban area, the remaining reside in the rural part of the district *(33).*

map

Figure 2. Map of Ethiopia, indicating study area (highlighted)

Health facilities distribution of health centers in the district is 1:250,000 (8 health centers, HC, for 2 million people). This is far below the World Health Organization (WHO) standard of 1:25,000.

The government now is building new health facilities through out the region including Sidama district. The facility distribution in the district is access based. Sidama district is sub-divided in to nine woredas (sub-districts) and each woreda is again sub-divided into many villages (kebeles), of which most having village health posts.

The local economy in the district is a mixture of cash cropping (mainly coffee) and subsistence agriculture *(34).*

4.2 Study design and Sampling procedure.

A quantitative study using a cross-sectional survey was conducted. Out of the 9 districts in the Southern region, Sidama was selected because of its largest size and largest number (eight) of health centers which are a primary health care units in the context of Ethiopia.

Government owned three health centers (Awassa, Wondo-genet and Mesenkela) were randomly selected to represent the major areas in the district. They serve the community living in rural and semi-urban areas. A sample of patients above 14 years, and mothers attending maternal and child clinic, family planning and child welfare clinic was taken at the end of their visit. The sample size of 400 was calculated using the proportion of client satisfaction, which were about 40%, in the previous study done in the study area.

Since there were no enough patients, in each day, visiting the health centers taking the sample as planned using systematic random sampling method was not possible. Therefore, all patients available after finishing their visit were asked for their consent to be interviewed.

4.3 Instrument used

Clients completed the semi-structured Visit Rating Questionnaire (VRQ) containing 26 items as they leave the primary health units. Since area of client satisfaction study is deficient in the low-income countries, the items tried to cover multi-dimensions to make the study comprehensive.

The questionnaire also includes clients' age, sex, marital status, employment status, income for the household, level of education, number of previous visits in the last 12 months, number of children less than 15 years in the family, reason for visit and health condition on the day of visit. These ten independent variables were chosen because of the influence they might bring on the level of satisfaction, one way or the other.

The questionnaire was developed using published literatures on development of valid instruments for client evaluation of primary health care *(35-38).* Response categories vary according to the type of questions. A five point Likert scale (5 = strongly agree, 4 = somewhat agree, 3 = uncertain, 2 = somewhat disagree and 1 = strongly disagree) was used for aspects of care, like cost; recommendation of services; need for alternative physician after visit; whether enough investigation and drugs were ordered or not.

Response categories with point 5 for very good, 4 for good, 3 for fair, 2 for poor and 1 for very poor were used on aspects of care, like personal manner; Informativeness about illness, investigation and management; Technical skill (competence); Overall quality and reception. Response categories with 5 point for highly acceptable, 4 for acceptable, 3 for fairly acceptable and 1 for not acceptable at all were used for waiting time; duration of consultation and convenience to approach health care providers. Lastly for question, whether expectation met or not a 5 point response was set, 5 for 'to a very large extent', 4 for 'to a large extent, 3 for 'to some extent', 2 for not much and 1 for 'not met at all'.

4.4 Data collection

The data was collected in three primary health care units in Sidama zone in autumn, 2000. Before the actual data collection the questionnaire was piloted. After correction four trained interviewers, who can speak the local 'Sidamigna' and 'Oromigna' languages, conducted the interview at the exit of the health center.

4.5 Data analysis

All the data were compiled in to SPSS version 9.0 program. The data was entered with the response categories coded in numbers, ranging from 5 (highest score) to 1 (lowest score). For the convenience of analysis, re-coding of scales was done to dichotomse the results. Clients who marked score 5 and 4 were considered as 'satisfied' and re-coded as 1., while scores marked from 1-3 as 'not satisfied' and re-coded as 2. However, not satisfied should not necessarily mean dissatisfied, since the neutral categories included in this group. For each dependent variable bivariate and multivariate analysis were done to see relations with independent variables. Age and sex were included in all the analysis. Logistic Multiple regression analysis was done in two ways. One way was by putting all the independent variables together into the analysis. The other way was ran by selecting only those that appeared to be statistically significant ($p < 0.05$) in the bivariate analysis. The second way was found to be more suggestive, and because of this only those that

appeared to be statistically significant in the second way of the analysis are reported as the result in this study.

4.6. Validity, reliability and Generalization

Generalization.

As Table III shows, Of the respondents 50 % were adolescents and youth, 30.1 % were illiterates, and two-third (66.6%) were female. These figure are not consistent with the general population, where most adult groups are not included. The married population in the district is above 50% and the illiteracy rate is also about 70%. So these bring limitations on representativeness of the sample and broad generalization has to be made with cautions.

Validity and reliability

The contents of the instrument used were adopted using literatures on development of valid instruments for client evaluation of PHC in developed and developing countries *(35-38).* The gathered instrument was discussed with experts and a team in health research units in the locality, and then translated in to the local language ('Sidamign'). Trained personnel from the local area who can speak English and the local language piloted the questionnaire before actual data collection. By doing so the instrument was made to fit the local cultural setting.

The question of reliability was tried to be kept high by closer supervision and by giving a chance to the client to ask for any which he/she are not clear about.

5. Results

A total of 329 clients responded (response rate = 82%) out of 400, and interviewed in the three primary health care units in Sidama district, Southern Ethiopia. The mean age of the respondents was 28 years old. As indicated in table III, 156 (49%) of the interviewees belonged to adolescent and youth group (15-25 years of age), 111 (35%) in the range of 26-35 years and the rest 52 (16%) above 35 years of age. Relatively, younger people consume the services in excess compared to those in a previous representative survey *(39).*

Of the respondents, 127 (39%) were male and 201(61%) were female. With male to female ratio of 0.66 and relative to the population in the district, where 49% are female, utilization of the health services in this study was higher among female than male.

The proportions of married attendants were 242 (73%), about three-quarters of all. And the remaining 71 (22%) and 16 (5%) were single and others (widowed, divorced and separated), respectively.

About one third of the respondents, 99 (30.1%) were illiterate, while 112 (34%) were in primary education, 54 (16%) were in junior secondary and 64 (19%) were in secondary education and above. The proportion of illiterates was not compatible with illiteracy rate of the general population where the rate reaches about 70 %. This indicates that among people with no education utilization of the primary health services is low.

The question for income was an open-ended one and getting an exact response on income of the household was difficult. However, 323 (98% of interviewed) interviewees responded, in which 133 (41%) said to have no income at all, 149 (46%) said to earn less than 250 Birr per month (8.3 Birr = 1 USD, in the current rate) and 41 (13%) earn more than 250 Birr per month. So, large number of the primary health care attendants had an income less than 30 USD per month. The responses were given on the basis of what clients earn in cash or harvest in kind in a year, then changed in to money.

Regarding employment status, 23 (7%) were government employee, 199 (60%) were self employee, 33 (10%) were students and 72 (22%) were unemployed. The result of employment status seems to be not consistency with result of income. Unemployment, which was 22%, even including students (10% of respondents) who might not have income, should not be exceeded by proportion of people with no income (41%) at all.

Among the respondents, considerable number of them did not often visit the primary health services. When clients were interviewed about the frequency of visit they made in the last 12 months on their behalf or the family member, 155 (47%) of respondents answered option “none or once”. In the last one year 174 (53%) of respondents visited the health services more than once.

Table V summarizes the findings on level of client satisfaction on wider dimension. The dimensions considered in the study were, doctors and nurses conduct, informativeness (about the diagnosis and treatment and drug use), competence (of doctors and nurses), overall quality (of care and health care providers), accessibility (financial, waiting time, duration of consultation, and convenience to approach health workers), facility (overall building, equipment, cleanliness and privacy), reception (smoothness of registration), and outcome (expectations met, need for alternative physician and recommendation of services).

In this study the level of satisfaction ranged from 42% to 87%, usage of basic equipment and humanness of the nurses scored the lowest and the highest, respectively. As table V suggests the potential problems that appeared to be below satisfaction level of 60% were usage of basic equipment, expectation met (48%), overall quality of care (58%), overall quality of facility (59%), overall quality of health care providers (59%) and cleanliness of the facility (59.9%).

The top eight levels that scored above 75% were, respect and friendliness of the nurses (87%), privacy of rooms (83%), respect and friendliness of the doctor (82%), competence of the nurses (80%), convenience to approach health care providers (79%), whether the cost paid was reasonable (78%), recommendation of services to families and friends (78%) and smoothness of registration procedure (77%).

Level of satisfactions that appeared to lie between 60% and 75% were, duration of consultation (74%), having done of enough laboratory test (73%), getting enough explanation about treatment and drug use (72%), competence of the doctors (71%), waiting time to get consultation (65%), getting enough drugs prescribed (64%), getting enough explanation about the diagnosis (62%) and overall building of facility (62%).

Table VI shows the multivariate relation between various dimensions of client satisfaction and explanatory variables. The variables considered that might influence the levels of satisfaction were age, sex, marital status, employment status, level of education, income for the household, number of children (less than 15 years) in the family, frequency of previous visit in the last 12 months, reason for visit, and health condition on the day of visit. The table presents only those variables that appeared to be statistically significant on the analysis.

Informativeness of the doctor and the nurses on health problems of the patient, treatment and drug use. Health conditions and income for the household happen to influence satisfaction on informativeness. Regarding explanations, people who felt sick perceived that they were better informed, than healthy ones, about the management of their health problems. Clients who were not certain about their health condition believe that enough drugs were prescribed to them, but they were not explained enough about drug use and

management aspects. Those who felt apparently healthy have not only been less satisfied with the drug prescription, but have also felt less explained as to how they were managed. As income increased a trend was see to be less informed about the health problem. Relatively people with no income informed better about their health problems than clients with some income. From clients' view, Informativeness of doctors and nurses thus appear to be weak for clients who apparently felt healthy and for those with better income.

Humanness (conduct) of the doctors and the nurses. Clients' age and level of education influenced satisfaction regarding health care workers' conduct. It is the conduct of the nurses, rather than the doctors', that turn up to be statistically more significant on the multivariate analysis. Compared to clients aged 26 and above, adolescents and youth clients experienced less respect by nurse staff and so also clients with no education when compared with attendants with education of any level.

Accessibility of cost. Satisfaction on cost was related with level of education. As education level increase a trend was seen to claim for the price paid for the services to be not reasonable, and it became not acceptable for clients with secondary education or above, OR = 0.27 (95% CI, 0.09-0.87).

Waiting time. Accessibility in this respect appear to be problematic in Antenatal care, OR = 0.24 (95% CI, 0.65-0.89), than clients who came for consultation and treatment. Clients who came for consultation and treatment tolerate better the waiting time, compared to attendants in Family planning (FP), Child welfare clinic (CWC) and Ante natal care (ANC), though statistical significance is seen only in the later groups.

Perceived need ('Demand') for further drug and treatment. 'Demand' on management was influenced by health condition of clients on the day of visit. Clients who felt sick and who felt healthy about their health condition appear to be more demanding for more drugs than those who feel uncertain about their health. The later category happen to have two and half fold increase in odds as compared to sick ones and three fold increase in odds compared with healthy ones. Surprisingly, those who didn't experience any sense of illness (healthy ones) showed up to demand more drugs than that of sick ones, though the outcome is not statistically significant.

Overall quality of care. The influencing factor for satisfaction here was the level of education. In this matter, a trend is seen to have more satisfaction as the level of education increases. Compared to clients with no education those who were in secondary

education and above have about five times appreciation for the overall quality of care, OR = 5.1 (95% CI, 2.15-12.06).

Facility. Problems of facilities were reflected in the quality of building, equipment usage, and cleanliness; level of clients' education, income for the household, employment status and marital status being the influencing factors. Increment in level of education appears to be positively related with perceived quality of building, equipment and sanitation. The odds of clients in secondary education and above were many folds higher compared to those who have no education. This is a strange finding, given the low standard of facilities. Consumes with some income (1-250 Birr per month) were less satisfied with the building quality, equipment quality and cleanliness compared with clients with no income at all or clients with better income (> 250 Birr per month). Compared to unemployed and employed, students were least satisfied with the overall quality of the building, equipment and cleanliness (OR = 0.22, 95% CI, 0.07-0.72; OR = 0.11, 95% CI, 0.02-0.45); OR = 0.27, 95%, 0.08-0.90, respectively). Married clients were found to have three fold less satisfaction (OR = 0.25 95% CI, 0.07-0.85) with overall building compared to single ones. As odds for visits more than three times suggest (OR = 0.36, 95% CI, 0.17-0.74), when clients visit the facilities for more than three times they tend to develop negative feelings on cleanliness.

Reception. On satisfaction over reception, the influencing factor was reason for a visit. In general relative to attendants for consultation and treatment, smoothness of registration was lacking for FP, ANC and CWC attendants. The later groups being the most affected, as the odds for CWC attendants imply (OR = 0.21, 95% CI, 0.07-0.66).

Outcome and perceived need for alternative physician. Satisfaction on outcome was found to be associated with number of children and health condition of clients on the day of visit. Relative to those who have no children, attendants with children are the ones whose expectations were not met, and needed of alternative physician and didn't want to recommend the services to families and friends. Especially those who have 1-2 children were critical on recommending the services (OR = 0.46, 95% CI, 0.21-0.99) and unmet expectations (OR = 0.41, 95% CI, 0.22-0.77). In general there was a tendency to have more tolerance on the services as a number of children increase. Unimaginably, clients who feel apparently healthy showed to have unmet expectations (OR = 0.45, 95% CI, 0.26-0.81), but they also seem to be not hesitant to recommend the services to others (OR = 2.34, 95% CI, 1.02-5.37).

Factors that didn't come out to be statistically significant on the multivariate analysis were conduct of the doctors, perceived need for laboratory test, competence of health workers, privacy of the rooms, overall quality of health care providers, duration of consultation time and convenience to approach health care providers.

Table III - Personal details of the respondents at primary health units in Sidama district, Southern Ethiopia, 2000.

No	Personal details	categories	n (%)
1	Age	15-25 years	159 (49.0)
		26-35 years	111 (35.0)
		> 35 years	52 (16.0)
2	Sex	male	127 (38.7)
		female	201 (61.3)
3	Marital status	single	71 (21.6)
		married	242 (73.6)
		divorce, widowed, separated	16 (4.9)
4	Employment status	Government employed	23 (7.0)

		Self employed Students Unemployed	199 (60.0) 33 (10.0) 72 (22.7)
5	Income estimated for the household	no income 1-250 Birr per month >250 Birr per month	133 (41.0) 149 (46.0) 41 (13.0)
6	Educational status	no education primary education junior secondary education secondary and above	99 (30.1) 112 (34.0) 54 (16.4) 64 (19.4)
7	Any previous visit made to the PHC unit in the last 12 months	once or none twice to trice four times and more	155 (47.1) 73 (22.2) 101 (30.7)
8	Number of children < 15 years in the family	no child 1 -2 children 3-4 children 5 and more	107 (32.5) 113 (34.3) 83 (25.2) 25 (7.6)
9	Major reason for visit	consultation and treatment antenatal clinic family planing child welfare clinic	232 (61.5) 30 (9.1) 17 (5.2) 48 (14.6)
10	Health condition on the day of visit	healthy and very healthy uncertain sick and very sick	120 (36.4) 47 (14.3) 162 (49.2)

Table IV – *Multi-dimension client satisfaction results at the Primary health care in Sidama District, Southern Region, 2000. Results are numbers (raw Percentages).*

	strongly/somewhat agree n (%)	uncertain n (%)	somewhat/strongly disagree n (%)	Total (%)
The price I paid was reasonable for service	183 (78.3)	18 (7.7)	33 (14.1)	234 (100)
I will recommend the health service to families & friends	257 (78.1)	33 (10.0)	33 (10.1)	323 (100)
The person I saw did enough tests to find out what is wrong with me	273 (73.0)	36 (15.2)	28 (11.8)	237 (100)
The person I saw did prescribe enough drugs to treat me	182 (63.9)	72 (25.3)	31 (10.9)	285 (100)
After today's visit I still feel uncertain so I need to see another physician	124 (66.6)	26 (14.0)	36 (19.4)	186 (100)
	very good/good	fair	poor/ very poor	
The personal manner (courtesy, respect, sensitivity, friendliness) of the doctor I just attended was	152 (82.2)	22 (11)	11 (6.0)	185 (100)
The personal manner (courtesy, respect, sensitivity, friendliness) of the nurse I just attended was	108 (87.1)	5 (4.0)	11 (8.8)	124 (100)
The personal manner (courtesy, respect, sensitivity, friendliness) of the laboratory technician I just attended was	104 (78.8)	19 (14.4)	9 (6.8)	132 (100)
The personal manner (courtesy, respect, sensitivity, friendliness) of the pharmacy technician I just attended was		186 (83.8)	25 (11.3)	11 (5.0) 222 (100)
The explanation given to me by the health worker (that is, clearness and completeness) about the diagnosis of your disease was		177 (61.7)	59 (20.6)	51 (17.8) 287 (100)

The explanation given to me by the health worker (that is, clearness and completeness) about the treatment and drug use was 286 (100)		192 (71.6)	44 (16.4)	32 (12.0)

	strongly/somewhat agree n (%)	uncertain n (%)	somewhat/strongly disagree n (%)	Total (%)
The explanation given to me by the health worker (that is, clearness and completeness) about the investigation ordered was 149 (100)		100 (67.1)	25 (16.8)	24 (16.2)
The technical skills, competence, of the doctor I attended was 181 (100)		129 (71.3)	38 (20.9)	14 (7.7)
The technical skills, competence, of the nurse I attended was 121 (100)		97 (80.2)	13 (10.7)	11 (9.1)
0verall building of the clinic was	198 (61.5)	64 (19.9)	60 (18.6)	322 (100)
Usage of basic equipment and technology in the clinic was 306 (100)		130 (42.5)	118 (38.6)	58 (18.9
Cleanness of the facility was 322 (100)		183 (59.9)	62 (19.3)	67 (20.8)
Privacy during consultation in the facility was 314 (100)		261 (83.1)	31 (9.9)	22 (7.0)

The over all quality of health care providers in this clinic was 322 (100)		191 (59.4)	108 (33.5)	23 (7.1)
The over all quality of the facility in this clinic was 325 (100)		191 (58.8)	87 (26.8)	47 (14.4)
The over all quality of care received today in this clinic was 325 (100)		190 (58.4)	111 (34.2)	24 (7.4)
	highly acceptable/acceptable		fairly acceptable	not acceptable/not at all
The length of time spent waiting to get consultation was 327 (100)		211 (64.6)	42 (12.8)	74 (22.6)
The length of time you spent during consultation was 326 (100)		242 (74.3)	47 (14.4)	37 (11.3)
The convenience to approach the health care provider was 328 (100)		258 (78.6)	48 (14.6)	22 (6.7)
	very smoothly/smoothly		fairly smoothly	not smoothly/not smoothly at all
How smoothly did the registration procedure run 325 (100)		247 (77.0)	26 (8.0)	52 (16.0)
	very large extent/large extent		to some extent	not much/ not at all
During today's visit to what extent the expectations you had before coming to this health care facility were met	158 (48.3)	121 (37.0)	48 (14.7)	327 (100)

Table V - Summary of level of Satisfaction, in percent, at primary health care unit in Sidama district, southern Ethiopia, 2000.

Satisfaction level		
< 60	60 - 75	>75
equipment	overall building	respect of nurses
expectation met	information about diagnosis	privacy
overall quality of care	enough drug prescription	respect of doctors
overall quality of facility	waiting time	convenience to approach providers
overall quality of health care provider	explanation about treatment and drug use	cost for services
cleanliness	enough lab. Test order	recommendation of services
	enough time for consultation	reception, smoothness
	competence of doctors	competence of nurses

** Perceived need for alternative physician could not be grouped here due to the different interpretation of percentage. The implication of the*

66.6 % of clients who needed of alternative physician goes with very poor quality and categorized with the first column.

Table VI- Influence of explanatory variables on satisfaction of various dimensions adjusted with multivariate logistic regression. client satisfaction: very satisfied = 1; less satisfied = 0.

	No	Odds ratio(95% Confidence interval)	p Value	Estimate(SE)
Explanation given about diagnosis				
Income				
0	115	1.0		
1-250	120	0.50(0.29-0.86)	0.012	-0.70(0.28)
>250	36	0.31(0.13-0.74)	0.007	-1.16(0.44)
Explanation given about treatment and drug use				
Health condition				
sick and very sick	126	1.0		
uncertain	34	0.39(0.14-1.11)	0.078	-0.94(0.53)
healthy and very healthy	92	0.47(0.24-0.92)	0.027	-0.75(0.34)
Respect and friendliness of the nurses				
Age				

15-25	57	1.0		
26-35	46	13.10(2.06-83.28)	0.006	2.57(0.94)
>35	16	5.69(0.35-93.59)	0.224	1.74(1.43)
Educational status				
no education	39	1.0		
primary and junior secondary	58	14.04(1.32-149.15)	0.028	2.64(1.21)
secondary and above	22	4.01(0.26-62.29)	0.321	1.39(1.39)

	No	Odds ratio(95% Confidence interval)	p Value	Estimate(SE)
Whether price paid was reasonable				
Educational status				
no education	66	1.0		
primary & junior secondary	117	0.63(0.28-1.39)	0.249	-0.47(0.41)
secondary and above	43	0.27(0.09-0.87)	0.028	-1.29(0.59)
Waiting time to get consultation				
Reason for visit				
consultation & treatment	220	1.0		
ANC	28	0.24(0.65-0.89)	0.032	-1.43(0.67)
FP	17	0.36(0.07-1.85)	0.220	-1.03(0.84)
CWC	43	0.87(0.45-1.66)	0.407	-0.36(0.44)

Demand for drug and treatment

Health condition				
sick and very sick	143	1.0		
uncertain	39	2.49(1.18-5.24)	0.016	0.91(0.38)
healthy and very healthy	94	0.69(0.38-1.28)	0.247	-0.36(0.31)
Overall quality of care				
Educational status				
no education	89	1.0		
primary and junior secondary	159	2.26(1.16-4.43)	0.017	0.82(0.34)
secondary and above	59	5.09(2.15-12.06)	0.000	1.63(0.44)

	No	**Odds ratio(95% Confidence interval)**	**p Value**	**Estimate(SE)**
Overall quality of Building				
Age				
15-25	148	1.0		
26-35	107	2.05(0.96-4.38)	0.064	0.72(0.39)
>35	48	3.05(1.17-7.91)	0.022	1.11(0.49)
Marital status				
single	65	1.0		

married	223	0.25(0.07-0.85)	0.027	-1.40(0.64)
divorced,widowed,separated	15	0.18(0.03—1.27)	0.086	-1.71(0.99)
Employment status				
unemployed	69	1.0		
student	30	0.22(0.07-0.72)	0.013	-1.50(0.60)
self-employed	182	0.40(0.16-1.04)	0.059	-0.90(0.48)
government employed	22	0.53(0.13-2.19)	0.318	-0.63(0.72)
Income				
0	122	1.0		
1-250	144	0.36(0.15-0.82)	0.015	-1.03(0.43)
>250	37	0.98(0.33-2.19)	0.978	-0.02(0.55)
Educational status				
no education	90	1.0		
primary and junior secondary	154	6.00(2.54-14.16)	0.000	1.79(0.44)
secondary and above	59	18.41(6.33-53.53)	0.000	2.91(0.54)

	No	**Odds ratio(95% Confidence interval)**	**p Value**	**Estimate(SE)**

Usage of basic Equipment

Employment status				
unemployed	69	1.0		
student	27	0.11(0.02-0.45)	0.002	-2.20(0.72)
self-employed	169	0.35(0.13-0.93)	0.035	-1.04(0.490
government employed	22	0.30(0.07-1.29)	0.105	-1.21(0.74)
Income				
0	116	1.0		
1-250	132	0.38(0.17-0.85)	0.018	-0.96(0.40)
>250	39	0.87(0.29-2.63)	0.801	-0.14(0.57)
Educational status				
no education	82	1.0		
primary and junior secondary	147	2.19(1.07-4.52)	0.033	0.79(0.39)
secondary and above	58	8.47(2.83-25.33)	0.001	2.14(0.56)

Cleanliness of the compound

Employment status				
unemployed	69	1.0		
student	28	0.27(0.08-0.90)	0.033	-1.31(0.61)
self-employed	184	0.26(0.10-0.65)	0.004	-1.35(0.47)
government employed	22	0.31(0.07-1.27)	0.102	-1.18(0.72)

Income				
0	121	1.0		
1-250	143	0.38(0.17-0.89)	0.025	-0.95(0.42)
>250	39	1.08(0.38-3.10)	0.884	0.08(0.54)

	No	Odds ratio(95% Confidence interval)	p Value	Estimate(SE)
Educational status				
no education	91	1.0		
primary & junior secondary	155	2.65(1.21-5.78)	0.014	0.97(0.40)
secondary and above	57	10.07(3.64-27.89)	0.000	2.31(0.52)
Previous visit				
none or once	143	1.0		
twicw to trice	68	0.66(0.32-1.38)	0.270	-0.41(0.37)
four times and more	92	0.36(0.17-0.74)	0.006	-1.03(0.37)

Smoothness of Registration

Reason for visit				
consultation and treatment	221	1.0		
ANC	29	0.27(0.07-1.01)	0.051	-1.32(0.68)
FP	17	0.39(0.07-2.13)	0.282	-0.92(0.86)
CWC	45	0.21(0.07-0.66)	0.007	-1.57(0.59)

Expectation met after visit

Children number				
no	101	1.0		
1-2 children	111	0.41(0.22-0.77)	0.005	-0.90(0.32)
3-4 children	78	0.39(0.19-0.83)	0.014	-0.93(0.38)
5-6 children	24	0.51(0.18-1.47)	0.212	-0.67(0.54)
Health condition				
sick and very sick	156	1.0		
uncertain	44	0.86(0.41-1.77)	0.674	-0.16(0.37)
healthy and very healthy	114	0.45(0.26-0.81)	0.007	-0.79(0.29)

	No	Odds ratio(95% Confidence interval)	p Value	Estimate(SE)
Recommendation of services				
Children number				
no	97	1.0		
1-2 children	110	0.46(0.21-0.99)	0.046	-0.78(0.39)
3-4 children	76	0.59(0.24-1.42)	0.240	-0.53(0.45)
5-6 children	23	0.94(0.29-3.09)	0.921	-0.06(0.60)
Health condition				
sick and very sick	149	1.0		
uncertain	46	0.75(0.38-1.49)	0.413	-0.29(0.35)
healthy and very healthy	111	2.34(1.02-5.37)	0.043	0.85(0.42)

Income				
0	122	1.0		
1-250	144	0.80(0.33-1.91)	0.613	-0.23(0.45)
>250	40	0.64(0.33-1.25)	0.196	-0.44(0.34)
		Need for alternative physician		
Marital status				
single	54	1.0		
married	114	4.76(1.11-20.43)	0.035	1.56(0.74)
divorced,widowed,separated	6	8.82(0.77-101.45)	0.080	2.18(1.25)
Children number				
no	80	1.0		
1-2 children	63	0.55(0.1679-1.8247)	0.331	-0.59(0.60)
3-4 children	26	0.16(0.0321-0.8560)	0.032	-1.79(0.83)
5-6 children	5	0.09(0.0067-1.4398)	0.090	-2.32(1.37)

6. Discussion

This study is one of the few reports on client satisfaction in developing countries. As evident in other satisfaction studies in developing countries *(13,24,38,39),* in interpreting our results some limitations should be considered, since considerable variations seen on community judgement as reflected on few of the multivariate results. The variations might be attributed by clients' implicit standard for critical and sharp judgement, politeness bias or artifact of the study design. The other limitation was on representativeness of the sample, since adolescents and youth population and married couples used the services in excess than expected, broad generalization on clients' perception on primary care has to be made with caution. In our study, however, numerous important findings did emerge which might need to be further evaluated in a more large-scale, comprehensive study. Overall, the analysis in this study revealed that out of 22 items used to measure quality, about 67% of them scored (Table V, first & second column) a level of satisfaction less than 75%. Though tangible local constraints could lead to certain level of dissatisfaction, the above result is considered rather poor (box) from what could possibly be attained, at least on some dimensions. After tackling the root causes of dissatisfaction it was made possible to raise up the level of satisfaction considerably for most dimensions in Chiclayo, Peru *(13).* Among the multi-dimensions examined in the present study overall quality of care & health care providers, facility (equipment and cleanliness) and outcome (expectation met) were found to be the potential quality problems, with level of satisfaction less than 60%, that require rapid management actions. A study, which was done on community satisfaction with primary health services in Morogoro, Tanzania, addressed also problem of equipment and sanitation as quality problems. And provision of more equipment for quality

improvement a
commented fo

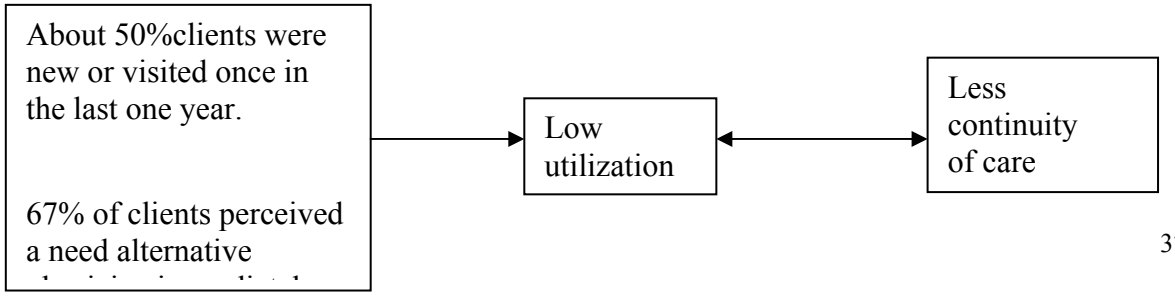
Given the evaluation was comprehensive and multi-dimensional

one, quality of primary care in this study is categorized as:

Very good, Good, Poor and Very poor.

Categories	Level of satisfaction, in percent
Very good	> 85
Good	75-84

Low utilization of service and less continuity of care were reflected in the study when about 50% of the clients did visit the facilities 'once or none' in the last 12 months, and when two-third (66.6 %) of clients perceived a need of alternative physician immediately after their visit (Table III). Continuity of care and satisfaction are bidirectionally-related *(11).* And Utilization rate is directly related with satisfaction *(13).* In the present study it is clearly seen that, all, utilization, continuity of care and satisfaction were related negatively with quality of care (figure 2).



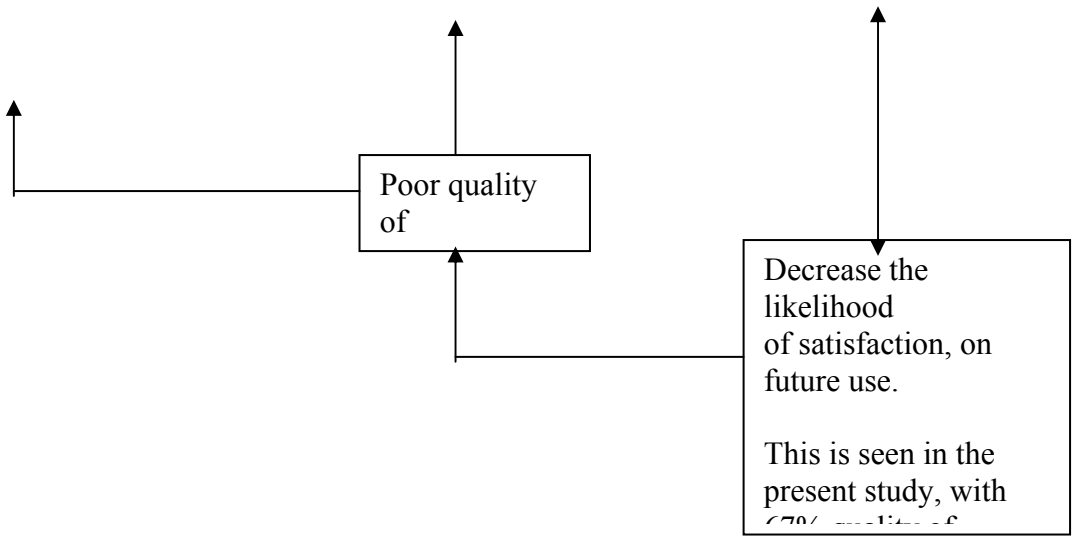


Figure 2 Relation between utilization, continuity of care, satisfaction and quality of care, as the case was in the study.

In our study the majorities (87%) of clients had little income, earning less than 30 USD per month and about one third (30.1%) of the primary care visitors were illiterate. Comparing to the regional figure for illiteracy rata, which is 70%, the proportion of illiterates in our study was low. It is difficult to cite exactly where would the rest 40% of illiterates go, if only 30.1% tend to visit the available public services. And so also, for clients who get sick for the second or third time, given about 50 % of primary visitors didn't attend the primary care for more than once in the last 12 months. Though most people had little income it is not uncommon in Southern Ethiopia for the people to visit alternatives to PHC, such as private sectors, traditional healers or others, despite their higher charges. In Southern Ethiopia, often people are seen to give priority to their health than food and clothing. Globally, private providers are becoming a challenge for the public health system during the last ten years *(42),* and in Ethiopia the situation also seem to hold truth as private sectors and their attendants are growing in a large amount, indicating a shift from public health sector, in the last ten years. In other aspect, many studies in developing countries *(43-47)* have shown that traditional healers play a key role in health care provision and in one study *(40)* they were even the first contact for 40 infants (33.9%) who died.

As is evident in table VI, Multivariate sorted out many detailed results. The analysis showed that the level of satisfaction on quality of primary care was influenced by many of the factors, except for sex that didn't appear to be statistically significant with any of the main variables. In this study level of education was first in the rank to have association with many of the dimensions of client satisfaction, to be followed by income for the household, health condition of the client on the day of visit, employment status & number of children in the family, age & marital status, and reason for visit & frequency of previous visit.

Attainment of education was found to be positively associated with the experienced overall quality of care, over quality of building, cleanliness of the compound, usage of basic equipment and humanness (conduct) of the nurses. The exception was with cost where the

odds dropped down to one-quarter (OR = 0.27, 95% CI 0.09-0.87) and the price paid for the services appeared to be unacceptable for clients with secondary education and above than less or not educated ones. To make comparison on how education influence level of satisfaction, no previous studies could be found on electronic and manual search. However, some studies documented that the higher clients' level of education the lesser was the degree of satisfaction on doctors' advice *(41),* and less educated clients are more likely to report medical events less accurately than their more educated counterparts *(48,49).* From our result (Table IV), however, given the level of satisfaction on equipment usage was the lowest (42.5%), at least it is not expected that more educated clients to give more appreciation (Table VI, eight and half fold odds) on quality of equipment than clients with no education. The same mismatch holds true for overall quality of care, cleanliness. Regarding cost, given the very low users' fee (< 0.1USD) for the service at primary health care level, for educated ones to disagree on cost is still unexpected. Nevertheless, along the line of taught 'the service don't worth the price', there might be a room for the claim the cost was unreasonable.

Income for the household was found to be association with facilities and Informativeness. Compared with those who had no income at all and those who earned above average[6] (> 250 Birr per month), clients with some income (1-250 Birr per month) were critical and less satisfied about facilities (building quality, equipment usage and cleanliness). It may be may be obvious for a demand to increase when income increase, but why less satisfied compared with people earning more is difficult to explain. On having enough information, one may not wonder if clients with lesser income or clients who had no income receive less attention and explanation they need, but contrary to this our study revealed that clients with lesser income informed better about their illness. This is very encouraging since it stands against favoritism for the well off or discrimination on service provision linked with extra informal payment, as seen in some African countries *(26, 39).*

On the influence of health condition over level of satisfaction some discrepancies were seen. For instance, in comparison with the sick ones, clients who felt that they were healthy had unmet expectations, drop of odds by about half (Table VI), and yet they didn't hesitate to recommend the services for families and friends, odds ratio higher by 2.3 times. Again the mismatch on evaluation was seen when those who felt health demanded for more drugs than the sick ones, though not statistically significant. Together with the limitation of the study population (implicit standard for sharp judgement), the misconception of the term 'healthy' in clients' view might have brought such inconsistency. Moreover, psychosocial problems are not often taken into consideration when clients backup on their health condition, while the problem could still drive them to seek medical care or advise.

Regarding effect of employment on level of satisfaction over facilities, unemployed people tended to have better satisfaction than clients do in other categories. However, students were more critical and experience less satisfaction on facilities than other groups. Though the relation was strong, the number of students in the sample was so small that it is difficult to comment on the relation.

[6] Average income in Ethiopia is less than 250 Birr per month, given 110 USD (913 Birr per year) annual per capita income for the country.

It was exciting to see that the effect of family size was reflected on only outcome of the services. Comparing families who have no child, those families with children were seen to have higher level of unmet expectation, they didn't want to recommend the services and needed of alternative physician. In general, as number of children increase in the family quality of service appear to be fairly tolerable. But the relation was strong for those families with 1-2 children, who have more claims for unmet expectation and didn't recommend the service, but didn't want to run for alternatives. The reason for this result might be, more demand for health care as more excitation for the first born.

Level of satisfaction scored for respect and friendliness of the nurses was the highest (Table IV), however, the satisfaction was much less for adolescent and youth (15-25 years) group, compared with those above 25 years. This finding is consistent with previous study where clients aged 20 years and under were among list satisfied on courtesy of nurses *(41).* At this point it is worth to mention that for adolescents & youth, who are the risk groups for incurable diseases like HIV/AIDS, having such sense of disrespect from the health care workers make them less open for preventive and counseling activities.

Reception on arrival and waiting time were acceptable for clients who came for treatment and consultation. However, dissatisfaction on registration was strong for clients who visited the child welfare clinic on their child behalf and so also (dissatisfaction) on waiting time for mothers who came for antenatal care. Antenatal care is being recognized as important in rural community of many developing countries *(30)* and making clients feel comfortable once they get in touch with primary care is very crucial to minimize missed opportunities. This is because; pregnant mothers in southern region of Ethiopia usually arrange their antenatal visits together with the day in which they come for marketing. Marketing days are fixed in weekdays and they also come from very far places on foot.

Married women strongly felt for the need to see another doctor than what single women did. This reflects on unmet expectation, though not significantly related.

Concerning cleanliness of the compound, it was frequency of visit that happened to relate with. As frequency of visit increase satisfaction declines, reaching unacceptable level when clients visit for more than three times. Is it because the compound is getting dirt each time?, or may be, they become more critical on evaluating. The later sounds, for reasoning.

To summarize, Overall, in this study clients regarded 67% of primary care quality as poor and very poor. Infrastructures (equipment & sanitation), overall quality of care and unmet expectations were potential quality problems. These are followed by inter-personal relationships, professional skills and under prescription of drugs and laboratory investigations, from clients perspective. Over the multi-dimensions examined, level of education and income were the major influencing factors on clients' satisfaction.

7. Conclusions and Recommendations

Even though community judgement was not with out limitation, in this study clients' perception worked out to measure quality of care and cited where quality problems in the district primary care exist.

Overall, clients regard two-third of care in Sidama district primary health care as poor and very poor. Given the fact that such drop of quality (from clients' perspective) review of health care provision with in the operating health system is highly required in the district.

Infrastructure (equipment and sanitation), overall quality of care, and outcome as reflected by unmet expectation were potential quality problems that require *rapid management actions. To bring improvement, though additional funding might be required provision of equipment and maintenance of sanitation facilities are expected from the government side, since the equipment at PHC level are not sophisticated and not expensive neither*. The quality problems following the above are interpersonal relationship (Informativeness) and professional skills (as reflected by low level of satisfaction on competence of doctors, and perceived need for further prescription of drugs and investigations). These quality problems are still *alarming for the district health management,* to evaluate the problems further, using systematic team problem solving approach is recommended. To retain the skilled manpower longer, and improve competence of the staffs in the district and in the region as a whole, *staff training and incentives, salaries increment are basic requirements for quality improvement* process. Aspects of care, like humanness of health workers, competence of nurses, reception and privacy are encouraging and shall be strengthened in the process.

We have found worth mentioning also the adolescents and youth, fifty- percent attendants of the primary services, who roar for respect. Therefore, in the district primary care, *for the adolescent and youth group to be given enough regards* addressing the problem to the staff, especially to nurses, is very crucial, if widely available preventive interventions should become effective in practice.

To minimize the missed opportunities, consideration to reduce waiting time for the pregnant mothers is required.

Level of education and income were the top two influencing factors on clients' satisfaction over the multi-dimensions examined in this study.

In this study, a significant drop in quality of PHC services from clients perspective was seen in the district. Such drop of quality might have been a reason for low utilization and less continuity of care, which were reflected in this study. So, quality improvement process in the district is required to consider meeting clients' expectation (raising level of satisfaction) as a target. In addition to raising utilization rate and facilitating widely available preventive interventions, raising the level of clients' satisfaction might also contribute ultimately for improvement of the health status in the district, which is worse than other part of the country.

The present study shows how the primary care quality perceived from clients' view in southern Ethiopia, one of the developing countries. The results depicted the importance of clients to make clear signs of quality problems. So, **if client satisfaction is accepted** as integral part of quality of health care, **considering clients in evaluation** process and **health planning**, too, may be of great help in improving quality.

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9. Appendix

9.1. Appendix 1 – Clients Visit Rating Questionnaire.

Clients visit rating questionnaire

District_____

Clients consent:

Here are some questions about the health care you just received in this health facility. Currently study is being conducted in this district with the aim of improving the health care. Since clients are receivers of the services asking your view on health services is very important for quality improvement. And thus you are selected to give your view on some of the questions about the health services. The result of this study will be used for improvement of the quality of the health service in this health unit and the district. All views you provide for us will not in any case be disclosed to anyone, only used for the research purpose.

As you answer I would like you to answer referring only to the health care provider you saw today (or on your last visit).

Thanks for your willingness.

Interviewed by_____**Date**_____**, 2000.**

CLIENTS VISIT RATING QUESTIONNAIRE
At the Primary Health Care Level in a District,

Put mark ' ✓ ' in the box for the options you would like to answer.

I Identification of the respondents

1. Number. _____
2. Do you live in this district ❑ yes ❑ no
3. Age of the respondent_____
4. Sex of the respondent ❑ male ❑ female
5. Marital status of the respondent ❑ single ❑ married ❑ divorce ❑ widowed
6. Employment status of the respondent
   ❑ government employed ❑ self-employee ❑ student ❑ unemployed
7. Income estimated **for the household** per month in cash _____
8. Educational background of the respondent
   ❑ No education ❑ primary school ❑ junior secondary school ❑ secondary school ❑ diploma & above
9. Did you have any previous visit to this unit on your behalf or the family member in the last one-year
   ❑ four times and more ❑ trice ❑ twice ❑ once ❑ none
10. Do you have children less than 15 years in the family?
    ❑ Yes, if yes how many_____ ❑ no

II. Client's view on health service after visit at the Primary health care level

Instruction: Here are some questions about the visit you just made. **In terms of your view or Your satisfaction how would you rate each of the following (questions 11-25)**

Sr.nr	**In my view,**	**strongly agree**	**somewhat agree**	**uncertain**	**somewhat disagree**	**strongly disagree**	**not applicable**
11.	the price I paid was reasonable for the care I received	❑	❑	❑	❑	❑	❑
12.	the care I received was so good that I will recommend this health service to families & friends	❑	❑	❑	❑	❑	❑

13.	the person I saw did enough tests to find out what is wrong with me	❑	❑	❑	❑	❑	❑
14.	the person I saw did prescribe enough drugs to treat me	❑	❑	❑	❑	❑	❑
15.	the person I saw did consider referrals timely	❑	❑	❑	❑	❑	❑
16.	after finishing today's visit I still feel uncertain so I need to see another Dr/Ho/Nrs**	❑	❑	❑	❑	❑	❑

Sr.nr	**In my view,**	**very good**	**very good**	**fair**	**poor**	**poor**	**not applicable**
17.	the **personal manner** (courtesy, respect, sensitivity, friendliness) of the persons I just attended was, for the… . doctor/Health officer . nurse . laboratory technician . pharmacy technician . health assistant	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑
18.	the **explanation** given to me by the health worker (that is,clearness and completeness) about the: . diagnosis of your disease was . treatment and drug use was . investigations was . referral was . follow up was	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑	❑ ❑ ❑ ❑ ❑
19.	the **technical skills**(as pointed under) of the health worker I attended was, . completeness . carefulness . competence	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑
20.	the (about facilities) . overall building of the clinic was . equipment (regarding usage of basic equipment and technology) was	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑	❑ ❑ ❑ ❑

	. cleanness of the facility was . privacy of the facility was						
21.	the over all quality of **health care providers** in this clinic was	❑	❑	❑	❑	❑	❑
22.	the over all quality **of facility** in this clinic was	❑	❑	❑	❑	❑	❑
23.	the over all **quality of care** received today in this clinic was	❑	❑	❑	❑	❑	❑
	In your view,	***Very*** **Smoothly**		***fairly*** **smoothly**	***not*** **smoothly**	***not smoo*** **-thly at all**	**not applicable**
24.	how smoothly did the registration procedure run ?	❑	❑	❑	❑	❑	

Sr.nr	**In your view,**	**highly** **acceptable**		**fairly** **acceptable**	**not** **acceptable**	**not accep** **-table at all**	**not applicable**
25.	(about the consultation) . the length of time spent waiting to get consultation was . the length of time you spent during consultation was . the convenience to approach the health care provider was	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑	❑ ❑ ❑

26. **During** today's visit to what extent **the expectations** you had before coming to this health care facility were met ?
❑to a very large extent ❑to a large extent ❑to some extent ❑not much ❑not at all

27. Would you tell us your major reason for today's visit?
- ❑ consultation
- ❑ treatment
- ❑ ante-natal clinic
- ❑ family planning
- ❑ child welfare clinic
- ❑ others, specify

28. What would you say about your health condition today?
- ❑ very healthy
- ❑ healthy
- ❑ uncertain
- ❑ sick
- ❑ very sick

29. Does anything **good** happened during your visit that you didn't expect, if so please tell us what it is?

_____
_____
_____

30. Does anything **unpleasant** happened that you didn't expect, if so please tell us what it is ?

_____
_____
_____

** Dr = Doctor, Ho = Health officer, Nrs = Registered Nurse

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Client visit rating questionnaire, March 2000.